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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,535	03/15/2004	Sujal M. Patel	REALNET.014C1	1306
20995	7590	07/26/2007		
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER NGO, NGUYEN HOANG	
			ART UNIT 2616	PAPER NUMBER
			NOTIFICATION DATE 07/26/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/800,535

Applicant(s)

PATEL ET AL.

Examiner

Nguyen Ngo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 23, and 24 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12, 13, 19, 20, 21, and 22 of U.S. Patent No. 6,731,600.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed limitations of application 10/800,535 are a broader rendering of claims 12, 13, 19, 20, 21, and 22 of U.S. Patent No. 6,731,600.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 20-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claims 20 claim the non-statutory subject matter of a program. Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1754 (claim to a data structure per se held nonstatutory). Therefore, since the claimed programs are not tangibly embodied in a physical medium, encoded on a computer-readable medium and clearly recited as a computer program then the Applicants has not complied with 35 U.S.C 101.

Examiner suggests using such phrases as "A computer readable medium embedded with a computer executable program including instructions for".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 3, 4, 6, 7, 9, 11, 12, 13, 14, 20, 21, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Ravikanth (US 6327274), hereinafter referred to as Ravikanth.

Regarding claim 1, 6, 11, 20 Ravikanth discloses a method of determining network conditions, the method comprising:

receiving a plurality data packets from a server computer via a network communication link (transmitting a plurality of packets from a first network node (server) to a second network node, col1 lines 60-65); and

determining a one-way transmission latency (measuring one way transit times of packets, col1 lines 16-25), responsive to the receipt of two or more of the plurality of data packets, wherein the one-way latency identifies a duration of time that it takes to receive a data packet from the server in relation to a previously received data packet (computing a time delay between a time of transmitting the one packet and a time of receiving the one packet, col1 line65- col2 line 4).

Regarding claim 2, 12, 21, Ravikanth discloses the method of Claim 1, additionally comprising:

accessing a timestamp in each of the plurality of data packets, each timestamp approximately identifying a point in time when the server computer began transmitting the respective data packet (each of the packets having a timestamp which records time measured by the first clock, col1 lines 60-65); and

modifying each of the timestamps to account for any clock skew between a clock of the server computer and a clock of a receiving computer (clock skew R_s and clock skew R_d , col4 lines 31-50).

Regarding claim 3, 13, 22, Ravikanth discloses the method of Claim 1, additionally comprising reporting to a software module the transmission latency (col2 lines 41-56).

Regarding claim 4, 14, 23, Ravikanth discloses the method of Claim 1, wherein the data packets collectively comprise a portion of a media presentation rendered to a user (data packets such as the ones used by multimedia applications, col5 lines 4-10).

Regarding claim 7, Ravikanth discloses the latency detector of Claim 6, wherein the latency detector is a program configured to execute in the second computer (computer readable medium having instructions for causing a computer to perform the method of computing time delay, col2 lines 41-56).

Regarding claim 9, Ravikanth discloses the latency detector of Claim 6, wherein the transmitted packets collectively provide a streaming media presentation (data packets

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such as the ones used by multimedia applications, col5 lines 4-10).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 5, 8, 10, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Ravikanth (US 6327274), hereinafter referred to as Ravikanth.

Regarding claim 5, 10, 15, 24, Ravikanth fails to specifically disclose wherein the plurality of data packets are received via a modem. Ravikanth however discloses of a second node for receiving the plurality of packets as seen in figure 1. It would have thus been obvious to have the destination node (108) of figure 1 be a modem, as it is well known in the art to have destination nodes be modems in order to ensure proper communication to a user.

Regarding claim 8, Ravikanth fails to specifically disclose wherein the latency detector reports the transmission latency to the packet receiver. Ravikanth however discloses of a second node for receiving the plurality of packets as seen in figure 1. It would have thus been obvious to a person skilled in the art to have a latency detector report the transmission latency to a packet receiver (second node for receiving packets) in order to properly and efficiently inform the second node (receiver) of latency in a network.

10. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Ravikanth (US 6327274), in view of Packer (US 5802106), hereinafter referred to as Ravikanth and Packer.

Regarding claim 16, Ravikanth discloses a system for determining a latency in data communication, the system comprising (col2 lines 15-27):

a network (figure 1);

a packet receiver which receives one or more data packets from a first computer via the network (destination node (108 of figure 1) which receives a plurality of packets, col2 lines 18-20 and figure 1); and

determining changes in latency in data communication from the first node to second node (measuring one way transit times of packets, col1 lines 16-25), responsive to the receipt of the data packets by the packet receiver, wherein the latency identifies a duration of time that it takes to receive a data packet from the first node relative to a previously received data packet (computing a time delay between a time of transmitting the one packet and a time of receiving the one packet, col1 line65- col2 line 4).

Ravikanth however fails to specifically disclose of the first node being a server and a second node being a client. However in the same field of endeavor, Packer discloses of a system comprising two nodes, one of which being a server while the other being a client endpoint (figure 2). It would have thus been obvious to a person skilled in the art to incorporate the method of computing a time delay between nodes as disclosed by Ravikanth into the system comprising a sever and client as disclosed by Packer in order to efficiently determine latency between a server and a remote endpoint. It would have been further obvious to incorporate a latency detector in such remote client endpoint as latency may be correctly calculated at the remote endpoint.

Regarding claim 17, Ravikanth and Packer fails to specifically disclose wherein the latency detector reports the transmission latency to the packet receiver. Ravikanth however discloses of a second node for receiving the plurality of packets as seen in figure 1. It would have thus been obvious to a person skilled in the art to have a latency detector report the transmission latency to a packet receiver (second node for receiving packets) in order to properly and efficiently inform the second node (receiver) of latency in a network.

Regarding claim 18, the combination of Ravikanth and Packer, more specifically Ravikanth discloses the system of Claim 16, wherein the one or more data packets collectively provide a streaming media presentation (data packets such as the ones

used by multimedia applications, col5 lines 4-10).

Regarding claim 19, Ravikanth and Packer fails to specifically disclose wherein the plurality of data packets are received via a modem. Ravikanth however discloses of a second node for receiving the plurality of packets as seen in figure 1. It would have thus been obvious to have the destination node (108) of figure 1 be a modem, as it is well known in the art to have destination nodes be modems in order to ensure proper communication to a user.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Madhavapeddi et al. (US 6975656), Method and system for accurately calculating latency variation on an end-to-end path in a network
- b) Gruber et al. (US 5450394), Delay monitoring of telecommunication networks
- c) Mirek et al. (US 5878032), Delay monitoring of telecommunication networks
- d) Drysdale et al. (US 6058102), Method and apparatus for performing service level analysis of communications network performance metrics

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- e) Fontenot (US 6052726), Delay calculation for a frame relay network
- f) Leon (US 7050465), Response time measurement for adaptive playout algorithms
- g) Poulin (US 6545979), Round trip delay measurement

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen Ngo whose telephone number is (571) 272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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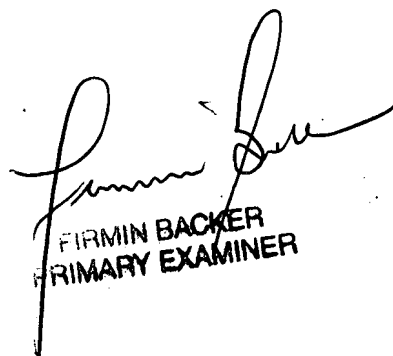
N.W.

Nguyen Ngo

United States Patent & Trademark Office

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